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H.U.
012995

647.3702

Job Sheet 200493



Part No: 647.3702

Job Qty: 1 pcs

Part Name: 412 Cable Cutter System, High



Part Weight: 0 lbs

Job Created: 9/12/19

Due Date: 10/31/19

Type: Stock

Status: New

Job Tracking No:

Priority: Medium

Created By: Jennifer Renwick

Description: SIOP

Note: DWG 647.3700 REV.A IPP REV:A 12.10.26 NEW ISSUE DD VERF:JLM IPP REV:B 15.01.26 as per ecr 14-214 DD VERF:JLM IPP REV:C AS PER REV NC3 15.03.18 JLM VERIFIED BY:DD IPP REV:D 18.01.19 AS PER DWG REV.A DD VERF:JFS

Ship Via:

Bill of Materials

Job Routing

Op No	Operation	Qty	Start Date	Due Date	Standard		Workcenter/Supplier		Sign-off
					Setup Hrs	Run Hrs	Workcenter / Supplier	Lead Time	
110	Packaging 1 - Pick Kit	1 pcs		10/31/19	0.00	0.00	Packaging 1 - 1		
							Packaging 1 - 2		
							Packaging 1 - 3		
							Packaging 1 - 4	DAS 74	NOV 19 2019
							Packaging 1 - 5	9-89	
							Packaging 1 - 6		
							Packaging 1 - 7		
							Packaging 1 - 8		
							Packaging 1 - 9		
							Packaging 1 - 10		
							Packaging 1 - 11		
							Packaging 1 - 12		
							Packaging 1 - 13		
							Packaging 1 - 14		
							Packaging 1 - 15		
							Packaging 1 - 16		
							Packaging 1 - 17		
							Packaging 1 - 18		
							Packaging 1 - 19		
							Packaging 1 - 20		
							Packaging 1 - 21		
							Packaging 1 - 22		
							Packaging 1 - 23		
							Packaging 1 - 24		
							Packaging 1 - 25		



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Container No: S233347



Part: 647.3702

Job No: 200493

Serial No/Batch: S233347

Revision: A

Inspector:

Exp Date:

Instructions: FAA STC SR02289LA 17/02/07, TC STC LoA RI

120 QC 4	1 pcs	10/31/19	0.00 0.00	Packaging 1 - 26	
				Packaging 1 - 27	
				Packaging 1 - 28	
				Packaging 1 - 29	
				Packaging 1 - 30	
				Packaging 1 - 31	
				Packaging 1 - 32	
				Packaging 1 - 33	
				Packaging 1 - 34	
				Packaging 1 - 35	
				Packaging 1 - 36	
				QC 4 - 28	
				QC 4 - 58	
				QC 4 - 69	
				QC 4 - 9	
				QC 4 - 46	
130 Packaging 3-1 - Stock - B4B 1 pcs		10/31/19	0.00 0.00	QC 4 - 68	
				QC 4 - 72	
				QC 4 - 74	
				QC 4 - 75	
				Packaging 3 - 1 - B4B	
				Packaging 3 - 2 - B4B	
				Packaging 3 - 3 - B4B	
				Packaging 3 - 4 - B4B	
				Packaging 3 - 5 - B4B	
				Packaging 3 - 6 - B4B	
				Packaging 3 - 7 - B4B	
				Packaging 3 - 8 - B4B	
				Packaging 3 - 9 - B4B	
				Packaging 3 - 10 - B4B	
				Packaging 3 - 11 - B4B	
				Packaging 3 - 12 - B4B	
				Packaging 3 - 13 - B4B	
				Packaging 3 - 14 - B4B	
				Packaging 3 - 15 - B4B	
				Packaging 3 - 16 - B4B	
				Packaging 3 - 17 - B4B	
				Packaging 3 - 18 - B4B	
				Packaging 3 - 19 - B4B	
				Packaging 3 - 20 - B4B	
				Packaging 3 - 21 - B4B	
				Packaging 3 - 22 - B4B	
				Packaging 3 - 23 - B4B	
				Packaging 3 - 24 - B4B	
				Packaging 3 - 25 - B4B	
				Packaging 3 - 26 - B4B	
				Packaging 3 - 27 - B4B	
				Packaging 3 - 28 - B4B	
				Packaging 3 - 29 - B4B	
				Packaging 3 - 30 - B4B	
				Packaging 3 - 31 - B4B	
				Packaging 3 - 32 - B4B	
				Packaging 3 - 33 - B4B	
				Packaging 3 - 34 - B4B	

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[Dart Hawkesbury] Job Sheet - Renwick, Jennifer

				Packaging 3 - 35 - B4B	
				Packaging 3 - 36 - B4B	
135 DC - 1 - B4B	1 pcs	10/31/19	0.00 0.00	DC - 1 - B4B	DAS 21 NOV 27 2019
				DC - 2 - B4B	9-59
140 QC 21 - FG	1 pcs	10/31/19	0.00 0.00	QC 21 - FG - 21	DAS 21 NOV 27 2019
				QC 21 - FG - 70	9-59
				QC 21 - SA - 53	9-59

Part Op 110 - (Pick Kit)

Descriptions: 120 - (QC4- 100% Inspect kits for completeness)

130 - Identify and pack for shipping as per PPP 647.3702

135 - (Document Control) Photocopy bluefile & type labels per PPP 647.3702

140 - (QC21- Final Inspection - Work Order Release)

F60341

Job BOM

Part / Item	Component Name	Quantity	Operation	Container
600.1012	Sealant PR1425B2 (#654 sem)	1 pcs (1 ea)	110-Packaging 1 - Pick Kit	5215144
601.2045	RTV (LOCTITE 598)	1 Ea (1 ea)	110-Packaging 1 - Pick Kit	5225164
601.3073	Connector p/n 082-4440	1 pcs (1 ea)	110-Packaging 1 - Pick Kit	5126427
601.3083	Adhesive Rubber Seal	1 pcs (1 ea)	110-Packaging 1 - Pick Kit	5140546
647.3801	412 Upper Cutter Assembly	1 pcs (1 ea)	110-Packaging 1 - Pick Kit	5122740
647.3804	204,205,212,214,412 Lower Cutter Assembly High	1 pcs (1 ea)	110-Packaging 1 - Pick Kit	5110315
647.3903	Deflector Assembly	1 pcs (1 ea)	110-Packaging 1 - Pick Kit	5149115
647.4010	Wiper Deflector RH	1 pcs (1 ea)	110-Packaging 1 - Pick Kit	5124002
647.4011	Wiper Deflector LH	1 pcs (1 ea)	110-Packaging 1 - Pick Kit	5153402
647.4110	Doubler	1 pcs (1 ea)	110-Packaging 1 - Pick Kit	5149258
647.4111	Doubler	1 pcs (1 ea)	110-Packaging 1 - Pick Kit	5149258
647.4112	Clip	1 pcs (1 ea)	110-Packaging 1 - Pick Kit	5149258
647.4113	Clip	1 pcs (1 ea)	110-Packaging 1 - Pick Kit	5149258
647.4114	Shim	1 pcs (1 ea)	110-Packaging 1 - Pick Kit	5152001
647.4115	Shim	2 pcs (2 ea)	110-Packaging 1 - Pick Kit	5152001
647.4116	Shim	2 pcs (2 ea)	110-Packaging 1 - Pick Kit	5152001
647.4210	Bracket LH	1 pcs (1 ea)	110-Packaging 1 - Pick Kit	5152001
647.4211	Bracket RH	1 pcs (1 ea)	110-Packaging 1 - Pick Kit	5152001
647.4310	LH Lower Strut	1 pcs (1 ea)	110-Packaging 1 - Pick Kit	5152001
647.4311	RH Lower Strut	1 pcs (1 ea)	110-Packaging 1 - Pick Kit	5152001
647.4312	LH Upper Strut	1 pcs (1 ea)	110-Packaging 1 - Pick Kit	5152001
647.4313	RH Upper Strut	1 pcs (1 ea)	110-Packaging 1 - Pick Kit	5152001
647.4410	Rail	1 pcs (1 ea)	110-Packaging 1 - Pick Kit	5152001
AN3-11A	Bolt	1 pcs (1 ea)	110-Packaging 1 - Pick Kit	5152001
AN3-4A	Bolt	8 Ea (8 ea)	110-Packaging 1 - Pick Kit	5152001
AN3C10A	Bolt	3 Ea (3 ea)	110-Packaging 1 - Pick Kit	5152001
CCR264SS-3-03	Cherry Rivet	2 Ea (2 ea)	110-Packaging 1 - Pick Kit	5152001
CCR264SS3-04	Rivet	16 Ea (16 ea)	110-Packaging 1 - Pick Kit	5152001
CR3212-4-2	Cherry Rivet	12 Ea (12 ea)	110-Packaging 1 - Pick Kit	5152001
CR3212-4-3	Cherry Rivet	12 Ea (12 ea)	110-Packaging 1 - Pick Kit	5152001
CR3212-4-4	Cherry Rivet	17 Ea (17 ea)	110-Packaging 1 - Pick Kit	5152001
CR3213-4-2	Cherry Rivet	4 Ea (4 ea)	110-Packaging 1 - Pick Kit	5152001
CR3213-4-3	Rivet, Cherry	13 Ea (13 ea)	110-Packaging 1 - Pick Kit	5152001
CR3213-4-4	Rivet, Cherry	32 Ea (32 ea)	110-Packaging 1 - Pick Kit	5152001
CR3213-4-5	Rivet	19 Ea (19 ea)	110-Packaging 1 - Pick Kit	5152001
CR3213-4-8	Rivet	42 Ea (42 ea)	110-Packaging 1 - Pick Kit	5152001
MS21042L08	Nut	4 Ea (4 ea)	110-Packaging 1 - Pick Kit	5152001
MS21042L3	Nut	18 Ea (18 ea)	110-Packaging 1 - Pick Kit	5152001
MS21047-3	Nut Plate	79 Ea (79 ea)	110-Packaging 1 - Pick Kit	5152001
MS21047L06	Nut Plate	4 Ea (4 ea)	110-Packaging 1 - Pick Kit	5152001
MS21047L08	Nut Plate	6 Ea (6 ea)	110-Packaging 1 - Pick Kit	5152001
MS21071L3	Anchor Nut	6 Ea (6 ea)	110-Packaging 1 - Pick Kit	5152001
MS24694-C53	Screw	4 pcs (4 ea)	110-Packaging 1 - Pick Kit	5152001
MS24694-S49	Screw	8 Ea (8 ea)	110-Packaging 1 - Pick Kit	5152001
MS27039-08-08	Screw	1 Ea (1 ea)	110-Packaging 1 - Pick Kit	5152001
MS27039-08-11	Screw	16 Ea (16 ea)	110-Packaging 1 - Pick Kit	5152001
MS27039-1-07	Screw	2 Ea (2 ea)	110-Packaging 1 - Pick Kit	5152001
MS27039-1-09	Screw	12 Ea (12 ea)	110-Packaging 1 - Pick Kit	5152001
MS27039-1-10	Screw	14 Ea (14 ea)	110-Packaging 1 - Pick Kit	5152001
NAS1149F0332P	Washer (AN960-10L)	42 Ea (42 ea)	110-Packaging 1 - Pick Kit	5152001
NAS1149FN832P	Washer (AN960-8)	157 Ea (157 ea)	110-Packaging 1 - Pick Kit	5152001
		34 Ea (34 ea)	110-Packaging 1 - Pick Kit	5152001

Job Allocations

Operation	Component Part	Required	Inventory	Allocated
110-Packaging 1 - Pick Kit	600.1012	1	11	0
	601.2045	1	17	0
	601.3073	1	8	0
	601.3083	1	8	0
	647.3801	1	0	0
	647.3804	1	1	0
	647.3903	1	2	0
	647.4010	1	17	0
	647.4011	1	8	0
	647.4110	1	14	0
	647.4111	1	3	0
	647.4112	1	4	0
	647.4113	1	8	0
	647.4114	2	3	0
	647.4115	2	3	0
	647.4116	1	8	0
	647.4210	1	11	0
	647.4211	1	10	0
	647.4310	1	4	0
	647.4311	1	3	0
	647.4312	1	9	0
	647.4313	1	7	0
	647.4410	1	12	0
	AN3-11A	8	151	0
	AN3-4A	3	281	0
	AN3C10A	2	32	0
	CCR264SS-3-03	16	212	0
	CCR264SS3-04	12	183	0
	CR3212-4-2	12	44	0
	CR3212-4-3	17	136	0
	CR3212-4-4	4	199	0
	CR3213-4-2	13	118	0
	CR3213-4-3	32	135	0
	CR3213-4-4	19	171	0
	CR3213-4-5	42	238	0
	CR3213-4-8	4	33	0
	MS21042L08	18	964	0
	MS21042L3	79	1,950	0
	MS21047-3	4	176	0
	MS21047L06	6	37	0
	MS21047L08	6	20	0
	MS21071L3	4	43	0
	MS24694-C53	8	135	0
	MS24694-S49	1	185	0
	MS27039-08-08	16	46	0
	MS27039-08-11	2	1,012	0
	MS27039-1-07	12	152	0
	MS27039-1-09	14	316	0
	MS27039-1-10	42	242	0
	NAS1149F0332P	157	2,002	0
	NAS1149FN832P	34	2,159	0

Part Specifications

Specifications could not be found.

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Parts List for Figure 2, Figure 3, and Figure 4 (Con't)

F/N	QTY (647.3701)	QTY (647.3702)	QTY (647.3703)	QTY (647.3704)	P/N	DESCRIPTION
39	4	4	4	4	601.1066	Rivet (CR3212-4-4)
41	16	16	16	16	601.2207	Rivet (CCR264SS-3-03)
42			18	18	601.1039	Rivet (CR3213-4-2)
43	24	24	16	16	601.0790	Rivet (CR3213-4-3)
44	17	17	14	14	601.1915	Rivet (CR3213-4-4)
45	14	14			601.1183	Rivet (CR3213-4-5)
47	REF	REF	REF	REF	601.2943	Locknut (MS21042-3)
51	4	4	4	4	600.0795	Nutplate (MS21047-3)
52	4	4	4	4	601.2957	Nutplate (MS21071L3)

NOTE: Remove cowling if needed to facilitate fitment and/or installation.

- 3.11 Transfer rivet locations to Doubler and Shims (F/N 9 & 13) and cleco in place. Drill remaining rivet locations and drill nutplate holes for the appropriate screws as shown Figure 2 (for P/N 647.3701 & 647.3702) or Figure 3 (for P/N 647.3702 & 647.3704).
- 3.12 Locate Brackets, F/N 16 & 17, as shown. Trim Brackets and airscoops as needed to fit, and transfer existing hole locations to Brackets, F/N 13 & 14.
- 3.13 Remove existing windshield center post screws.
- 3.14 Drill out rivets, which interfere with the Deflector, F/N 6, at the base of the windshield. Replace with countersunk rivets, as shown in Figure 5.

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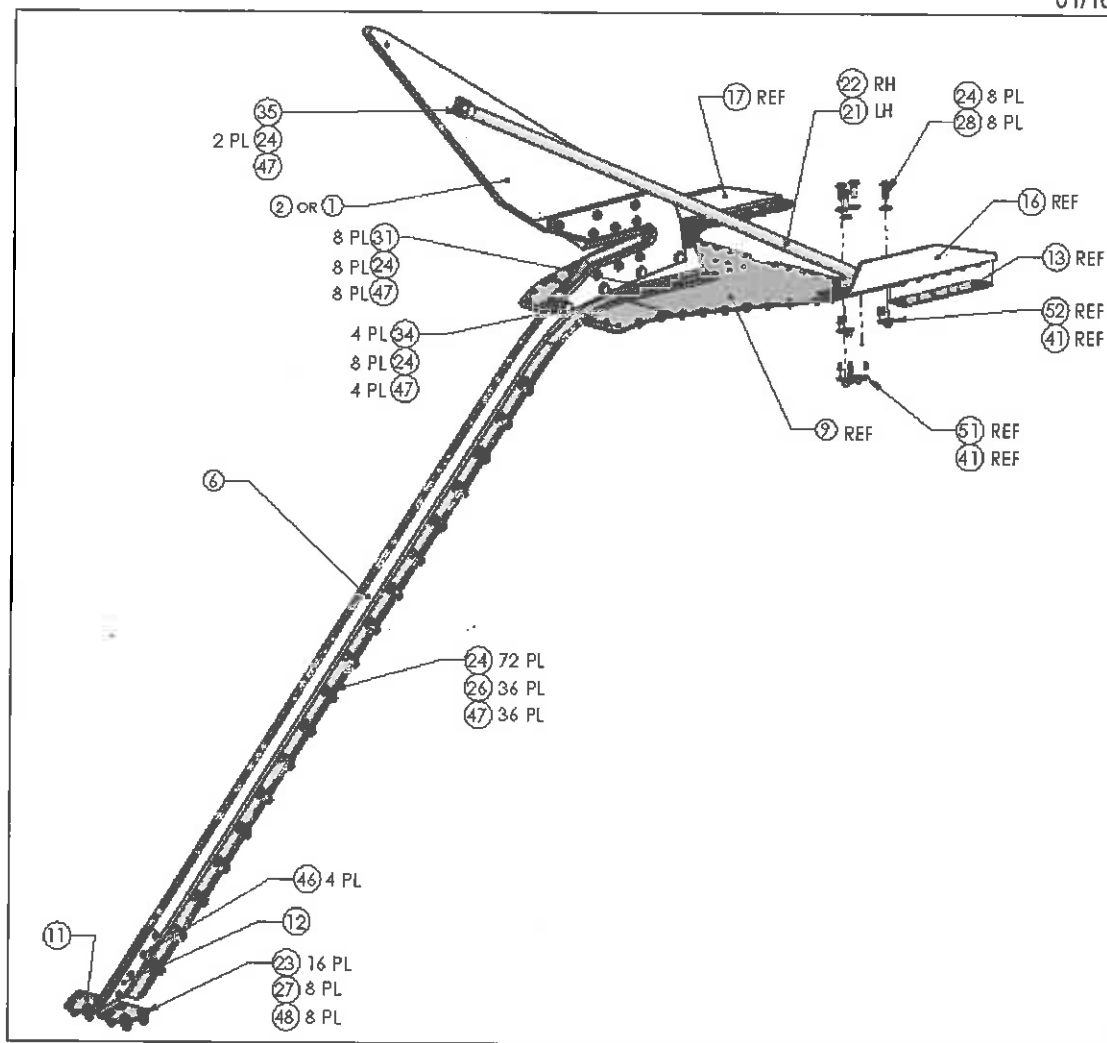


Figure 6: Upper Cutter

Parts List for Figure 5 & Figure 6

F/N	QTY (647.3701)	QTY (647.3702)	QTY (647.3703)	QTY (647.3704)	P/N	DESCRIPTION
1	1	1			647.3801	412 Upper Cutter Assy
2			1	1	647.3802	212 Upper Cutter Assy
6	1	1	1	1	647.3903	Deflector Assy
9	REF	REF	REF	REF	647.4110	Doubler

Parts List for Figure 5 & Figure 6 (Con't)

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F/N	QTY (647.3701)	QTY (647.3702)	QTY (647.3703)	QTY (647.3704)	P/N	DESCRIPTION
11	1	1	1	1	647.4112	Clip
12	1	1	1	1	647.4113	Clip
13	REF	REF	REF	REF	647.4114	Shim
16	REF	REF	REF	REF	647.4210	Bracket
17	REF	REF	REF	REF	647.4211	Bracket
21	1	1	1	1	647.4312	LH Upper Strut
22	1	1	1	1	647.4313	RH Upper Strut
23	16	16	16	16	601.2764	Washer (NAS1149FN832P)
24	98	98	98	98	601.1607	Washer (NAS1149F0332P)
26	36	36	36	36	601.1365	Screw (MS27039-1-10)
27	8	8	8	8	601.2263	Screw (MS27039-0808)
28	8	8	8	8	601.3069	Screw (MS27039-1-09)
31	8	8	8	8	601.2419	Screw (MS24694C53)
34	4	4	4	4	601.2826	Bolt (AN3-11A)
37	4	4	4	4	601.1604	Rivet (CR3212-4-2)
38	2	2	2	2	601.1065	Rivet (CR3212-4-3)
41	REF	REF	REF	REF	601.2207	Rivet (CCR264SS-3-03)
46	4	4	4	4	601.2364	Rivet (CR3213-4-8)
47	44	44	44	44	601.2943	Locknut (MS21042-3)
48	8	8	8	8	601.2973	Locknut (MS21042-08)
51	REF	REF	REF	REF	600.0795	Nutplate (MS21047-3)
52	REF	REF	REF	REF	601.2957	Nutplate (MS21071L3)

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Parts List for Figure 7

F/N	QTY (647.3701)	QTY (647.3702)	QTY (647.3703)	QTY (647.3704)	P/N	DESCRIPTION
5	1	1	1	1	647.4410	Rail
10	1	1	1	1	647.4111	Doubler
19	1	1	1	1	647.4311	RH Lower Strut
20	1	1	1	1	647.4310	LH Lower Strut
23	18	18	18	18	601.2764	Washer (NAS1149FN832P)
27	8	8	8	8	601.2263	Screw (MS27039-0808)
29	2	2	2	2	601.2893	Screw (MS27039-0811)
33	3	3	3	3	601.2823	Bolt (AN3-4A)
36	6	6	6	6	601.3082	Rivet (CR3212-4-1)
40	12	12	12	12	601.2491	Rivet (CCR264SS-3-04)
42	13	13	13	13	601.1039	Rivet (CR3213-4-2)
43	8	8	8	8	601.0790	Rivet (CR3213-4-3)
44	2	2	2	2	601.1915	Rivet (CR3213-4-4)
45	28	28	28	28	601.1183	Rivet (CR3213-4-5)
48	10	10	10	10	601.2973	Locknut (MS21042-08)
49	6	6	6	6	601.3065	Nutplate (MS21047L06)
50	6	6	6	6	601.3066	Nutplate (MS21047L08)

- 4.3 For Model 204 only: Drill out a rivet on each side of the forward end of the Rail. Position Plate, F/N 18, as shown in Figure 8. Plate should be placed inside airframe and centered with the Rail. If needed, trim Plate to fit.
- 4.4 For Model 204 only: Match drill the two existing rivet holes to Plate. Install Plate with rivets. If necessary transfer drill center rivet hole location and install countersunk rivet, F/N 37, to allow Rail to sit flush against fuselage as shown in Figure 8.
- 4.5 Match drill existing holes to Rail, F/N 5. Drill new hole locations in the Rail according to Figure 7.

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Parts List for Figure 8:

F/N	QTY (647.3701)	QTY (647.3702)	QTY (647.3703)	QTY (647.3704)	P/N	DESCRIPTION
3	1		1		647.3803	Lower Cutter Assy Low
4		1		1	647.3804	Lower Cutter Assy High
5	REF	REF	REF	REF	647.4410	Rail
15	1	1	1	1	647.4116	Shim
18			1	1	647.4212	Plate
24	10	10	10	10	601.1607	Washer (NAS1149F0332P)
34	4	4	4	4	601.2826	Bolt (AN3-11A)
35	1	1	1	1	601.1874	Bolt (AN3C10A)
37			1	1	601.1604	Rivet (CR3212-4-2)
39			3	3	601.1066	Rivet (CR3212-4-4)
47	5	5	5	5	601.2943	Locknut (MS21042-3)

- 4.10 Locate LH Lower Strut (F/N 20) as shown in Figure 7. Ensure the Strut is coincident to the Lower Cutter Assy Deflector, and that the Strut foot picks up existing rivet locations from airframe.
- 4.11 Remove interfering rivets. Replace rivets with countersink rivets at locations that cannot be picked up by Strut foot as shown in Figure 7.
- 4.12 Trim Strut foot (F/N 20) to fit as shown. Match drill the existing rivet holes to the Strut foot. Match drill the pre-drilled hole from the LH Lower Strut (located at the end of the strut) to the Lower Cutter Assy Deflector.
- 4.13 Temporarily attach Struts (F/N 19 & 20) to the Lower Cutter Assy using Bolt, Washers, and Nut as shown. Position RH Lower Strut, F/N 19, as shown.
- 4.14 Drill out rivets that interfere with RH Lower Strut foot. Replace rivets with countersunk rivets at locations that cannot be picked up by the Strut foot.
- 4.15 Trim RH Lower Strut foot to fit as shown. Transfer drill existing airframe holes to Strut foot.

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F/N	QTY (647.3701)	QTY (647.3702)	QTY (647.3703)	QTY (647.3704)	P/N	DESCRIPTION
7	1	1	1	1	647.4010	Wiper Deflector RH
8	1	1	1	1	647.4011	Wiper Deflector LH
24	25	25	25	25	601.1607	Washer (NAS1149F0332P)
25	6	6	6	6	601.2198	Screw (MS27039-1-07)
26	3	3	3	3	601.1365	Screw (MS27039-1-10)
28	3	3	3	3	601.3069	Screw (MS27039-1-09)
30	1	1	1	1	601.3070	Screw (MS24694-S49)
47	13	13	13	13	601.2943	Locknut (MS21042-3)
53	1	1	1	1	601.3083	Adhesive Rubber Seal (MIL-R-3065)

NOTE: Magnobond or equivalent may be used as a liquid shim to smooth and reduce gaps between the helicopter fuselage and components being installed for this Cable Cutter Kit.

- 5.1 Position Wiper Deflectors (647.4010 & 647.4011) on aircraft as shown in Figure 9 and mark the outline of the feet onto aircraft. Remove fasteners that the Deflector feet will pick up.
- 5.2 Model 204 only: Clean off sealant around drain tube at upper corners of windshield and remove drain tube.
- 5.3 Reposition Wiper Deflectors and secure in place with clamps. Make sure that outboard edges of lower and middle feet line up with windshield edge and that there is a 3/8" minimum clearance between the Wiper Deflector and windshield wiper arm in "park" position.
- 5.4 Check that the Wiper Deflector feet conform suitably and adjust as needed. Forward end of lower foot must be flush on aircraft. Mark hole locations onto feet and remove Deflectors.
- 5.5 Countersink hole under top feet that cannot be picked up and install Screw (F/N 30), Washer (F/N 24) and Locknut (F/N 47) as shown in Figure 9. If nutplate exists in this location, adjust hardware accordingly.

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INSTRUCTIONS FOR CONTINUED AIRWORTHINESS

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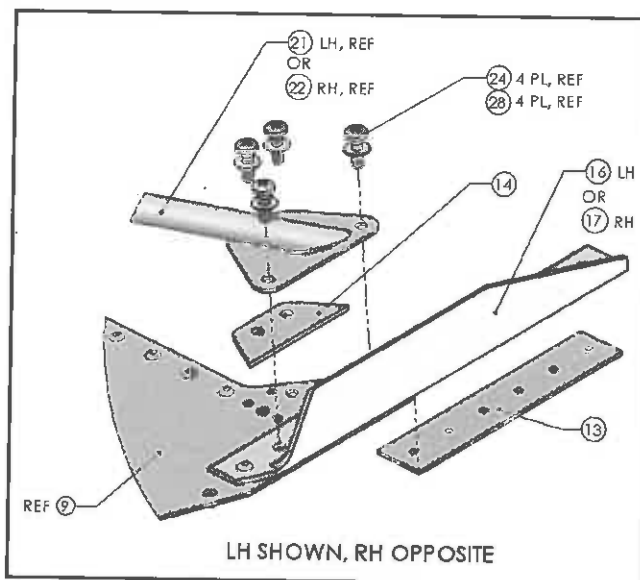


Figure 4: Shim Location, 2 PL

Parts List for Figure 2, Figure 3, and Figure 4:

F/N	QTY (647.3701)	QTY (647.3702)	QTY (647.3703)	QTY (647.3704)	P/N	DESCRIPTION
6	REF	REF	REF	REF	647.3916	Deflector
9	1	1	1	1	647.4110	Doubler
13	2	2	2	2	647.4114	Shim
14	2	2	2	2	647.4115	Shim
16	1	1	1	1	647.4210	Bracket
17	1	1	1	1	647.4211	Bracket
21	REF	REF	REF	REF	647.4312	LH Upper Strut
22	REF	REF	REF	REF	647.4313	RH Upper Strut
24	REF	REF	REF	REF	601.1607	Washer (NAS1149F0332P)
28	REF	REF	REF	REF	601.3069	Screw (MS27039-1-09)
31	REF	REF	REF	REF	601.2419	Screw (MS24694C53)
37	1	1			601.1604	Rivet (CR3212-4-2)
38	15	15	15	15	601.1065	Rivet (CR3212-4-3)

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Parts List for Figure 2, Figure 3, and Figure 4 (Con't):

F/N	QTY (647.3701)	QTY (647.3702)	QTY (647.3703)	QTY (647.3704)	P/N	DESCRIPTION
39	4	4	4	4	601.1066	Rivet (CR3212-4-4)
41	16	16	16	16	601.2207	Rivet (CCR264SS-3-03)
42			18	18	601.1039	Rivet (CR3213-4-2)
43	24	24	16	16	601.0790	Rivet (CR3213-4-3)
44	17	17	14	14	601.1915	Rivet (CR3213-4-4)
45	14	14			601.1183	Rivet (CR3213-4-5)
47	REF	REF	REF	REF	601.2943	Locknut (MS21042-3)
51	4	4	4	4	600.0795	Nutplate (MS21047-3)
52	4	4	4	4	601.2957	Nutplate (MS21071L3)

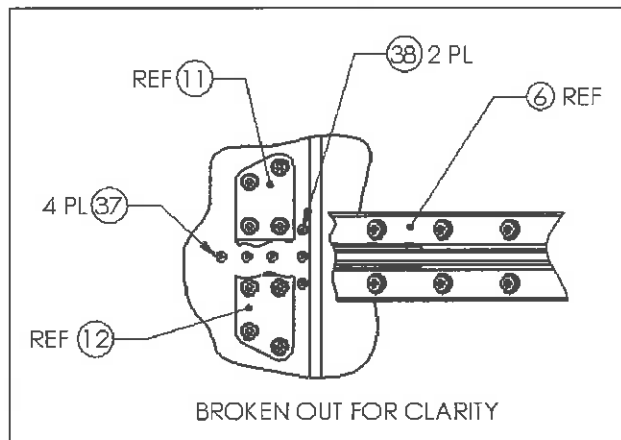


Figure 5: Countersunk Rivets at Base of Windshield

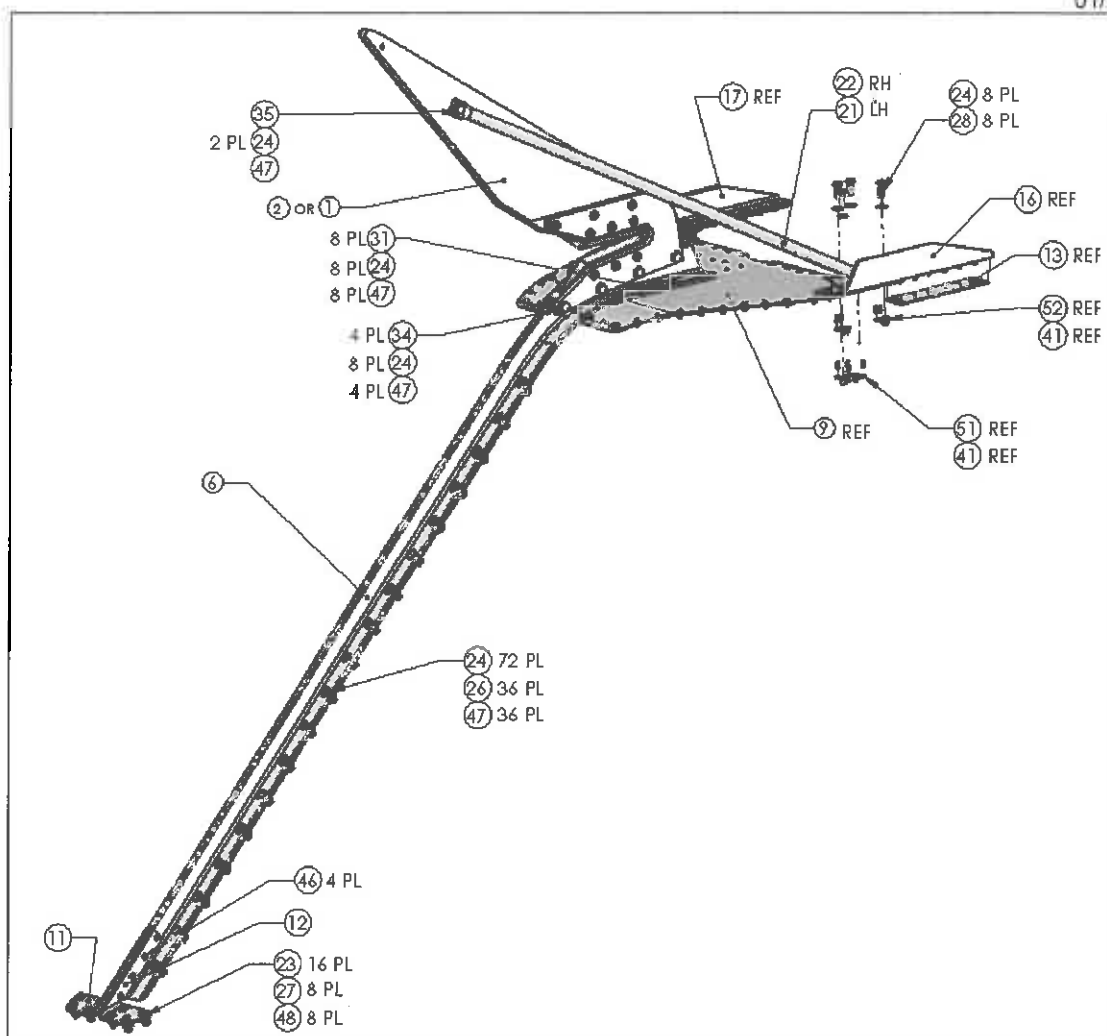


Figure 6: Upper Cutter

Parts List for Figure 5 & Figure 6:

F/N	QTY (647.3701)	QTY (647.3702)	QTY (647.3703)	QTY (647.3704)	P/N	DESCRIPTION
1	1	1			647.3801	412 Upper Cutter Assy
2			1	1	647.3802	212 Upper Cutter Assy
6	1	1	1	1	647.3903	Deflector Assy
9	REF	REF	REF	REF	647.4110	Doubler

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Parts List for Figure 5 & Figure 6 (Con't):

F/N	QTY (647.3701)	QTY (647.3702)	QTY (647.3703)	QTY (647.3704)	P/N	DESCRIPTION
11	1	1	1	1	647.4112	Clip
12	1	1	1	1	647.4113	Clip
13	REF	REF	REF	REF	647.4114	Shim
16	REF	REF	REF	REF	647.4210	Bracket
17	REF	REF	REF	REF	647.4211	Bracket
21	1	1	1	1	647.4312	LH Upper Strut
22	1	1	1	1	647.4313	RH Upper Strut
23	16	16	16	16	601.2764	Washer (NAS1149FN832P)
24	98	98	98	98	601.1607	Washer (NAS1149F0332P)
26	36	36	36	36	601.1365	Screw (MS27039-1-10)
27	8	8	8	8	601.2263	Screw (MS27039-0808)
28	8	8	8	8	601.3069	Screw (MS27039-1-09)
31	8	8	8	8	601.2419	Screw (MS24694C53)
34	4	4	4	4	601.2826	Bolt (AN3-11A)
35	1	1	1	1	601.1874	Bolt (AN3C10A)
37	4	4	4	4	601.1604	Rivet (CR3212-4-2)
38	2	2	2	2	601.1065	Rivet (CR3212-4-3)
41	REF	REF	REF	REF	601.2207	Rivet (CCR264SS-3-03)
46	4	4	4	4	601.2364	Rivet (CR3213-4-8)
47	44	44	44	44	601.2943	Locknut (MS21042-3)
48	8	8	8	8	601.2973	Locknut (MS21042-08)
51	REF	REF	REF	REF	600.0795	Nutplate (MS21047-3)
52	REF	REF	REF	REF	601.2957	Nutplate (MS21071L3)

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Parts List for Figure 7:

F/N	QTY (647.3701)	QTY (647.3702)	QTY (647.3703)	QTY (647.3704)	P/N	DESCRIPTION
5	1	1	1	1	647.4410	Rail
10	1	1	1	1	647.4111	Doubler
19	1	1	1	1	647.4311	RH Lower Strut
20	1	1	1	1	647.4310	LH Lower Strut
23	18	18	18	18	601.2764	Washer (NAS1149FN832P)
27	8	8	8	8	601.2263	Screw (MS27039-0808)
29	2	2	2	2	601.2893	Screw (MS27039-0811)
33	3	3	3	3	601.2823	Bolt (AN3-4A)
36	6	6	6	6	601.3082	Rivet (CR3212-4-1)
40	12	12	12	12	601.2491	Rivet (CCR264SS-3-04)
42	13	13	13	13	601.1039	Rivet (CR3213-4-2)
43	8	8	8	8	601.0790	Rivet (CR3213-4-3)
44	2	2	2	2	601.1915	Rivet (CR3213-4-4)
45	28	28	28	28	601.1183	Rivet (CR3213-4-5)
48	10	10	10	10	601.2973	Locknut (MS21042-08)
49	6	6	6	6	601.3065	Nutplate (MS21047L06)
50	6	6	6	6	601.3066	Nutplate (MS21047L08)

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Parts List for Figure 8:

F/N	QTY (647.3701)	QTY (647.3702)	QTY (647.3703)	QTY (647.3704)	P/N	DESCRIPTION
3	1		1		647.3803	Lower Cutter Assy Low
4		1		1	647.3804	Lower Cutter Assy High
5	REF	REF	REF	REF	647.4410	Rail
15	1	1	1	1	647.4116	Shim
18			1	1	647.4212	Plate
24	10	10	10	10	601.1607	Washer (NAS1149F0332P)
34	4	4	4	4	601.2826	Bolt (AN3-11A)
35	1	1	1	1	601.1874	Bolt (AN3C10A)
37			1	1	601.1604	Rivet (CR3212-4-2)
39			3	3	601.1066	Rivet (CR3212-4-4)
47	5	5	5	5	601.2943	Locknut (MS21042-3)

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Parts List for Figure 10:

F/N	QTY (647.3701)	QTY (647.3702)	QTY (647.3703)	QTY (647.3704)	P/N	DESCRIPTION
7	1	1	1	1	647.4010	Wiper Deflector RH
8	1	1	1	1	647.4011	Wiper Deflector LH
24	25	25	25	25	601.1607	Washer (NAS1149F0332P)
25	6	6	6	6	601.2198	Screw (MS27039-1-07)
26	3	3	3	3	601.1365	Screw (MS27039-1-10)
28	3	3	3	3	601.3069	Screw (MS27039-1-09)
30	1	1	1	1	601.3070	Screw (MS24694-S49)
47	13	13	13	13	601.2943	Locknut (MS21042-3)
53	1	1	1	1	601.3083	Adhesive Rubber Seal (MIL-R-3065)

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United States Of America
Department of Transportation - Federal Aviation Administration
Supplemental Type Certificate

Number SR02289LA

This Certificate issued to

Apical Industries, Inc. dba Dart Aerospace
3030 Enterprise Court, Suite A
Vista, California 92081

certifies that the change in the type design for the following product with the limitations and conditions therefor as specified herein meets the airworthiness requirements of Part 29 and CAR 7 of the Federal Aviation Regulations.*

Original Product Type Certificate Number:

Make:

Model:

* See attached FAA Approved Model List (AML)
Number SR02289LA for list of approved aircraft
models and applicable airworthiness regulations.

Description of Type Design Change: Installation of Apical Industries, Inc. Cable Cutters Kit in accordance with FAA approved Apical Industries, Inc. Master Document List MD412-101, Revision A, dated December 23, 2009, or later FAA approved revision.

Limitations and Conditions: This approval requires the inspections and overhaul schedules to be performed as mandated by Apical Industries, Inc.'s Instructions for Continued Airworthiness, ICA412-101, Revision N/C, dated January 5, 2010, or later FAA accepted revision.

This installation should not be incorporated in any aircraft unless it is determined that the interrelationship between this installation and any previously approved configuration will not introduce any adverse effect upon the airworthiness of the aircraft. If the holder agrees to permit another person to use this certificate to alter the product, the holder shall give the other person written evidence of this permission.

This certificate and the supporting data which is the basis for approval shall remain in effect until surrendered, suspended, revoked or a termination date is otherwise established by the Administrator of the Federal Aviation Administration.

Date of application: September 29, 2009

Date received: August 7, 2014

Date of issuance: April 27, 2010

Date amended:

By direction of the Administrator



Haifa Haj-Eid
(Signature)

Haifa Haj-Eid
Supervisor, Technical and Administrative
Support Staff
Los Angeles Aircraft Certification Office

(Title)

Any alteration of this certificate is punishable by a fine of not exceeding \$1,000, or imprisonment not exceeding 3 years, or both.